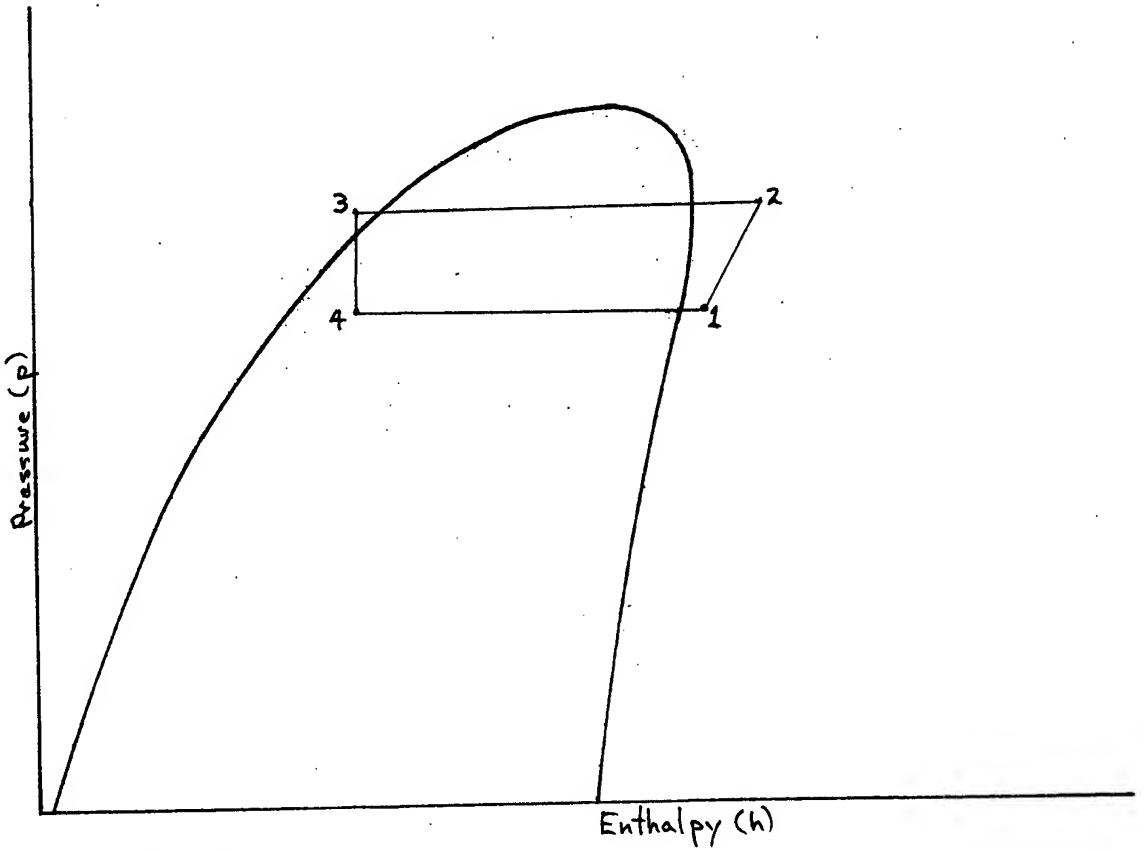


FIG 1

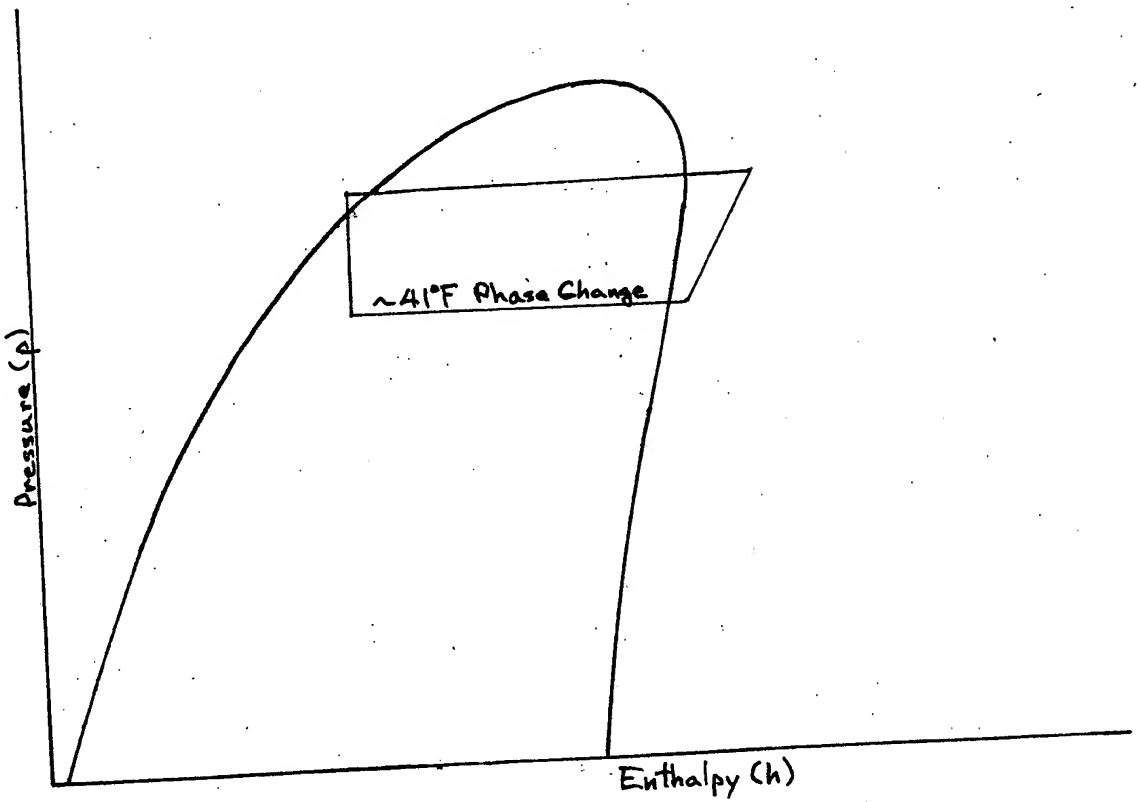


FIG 1a

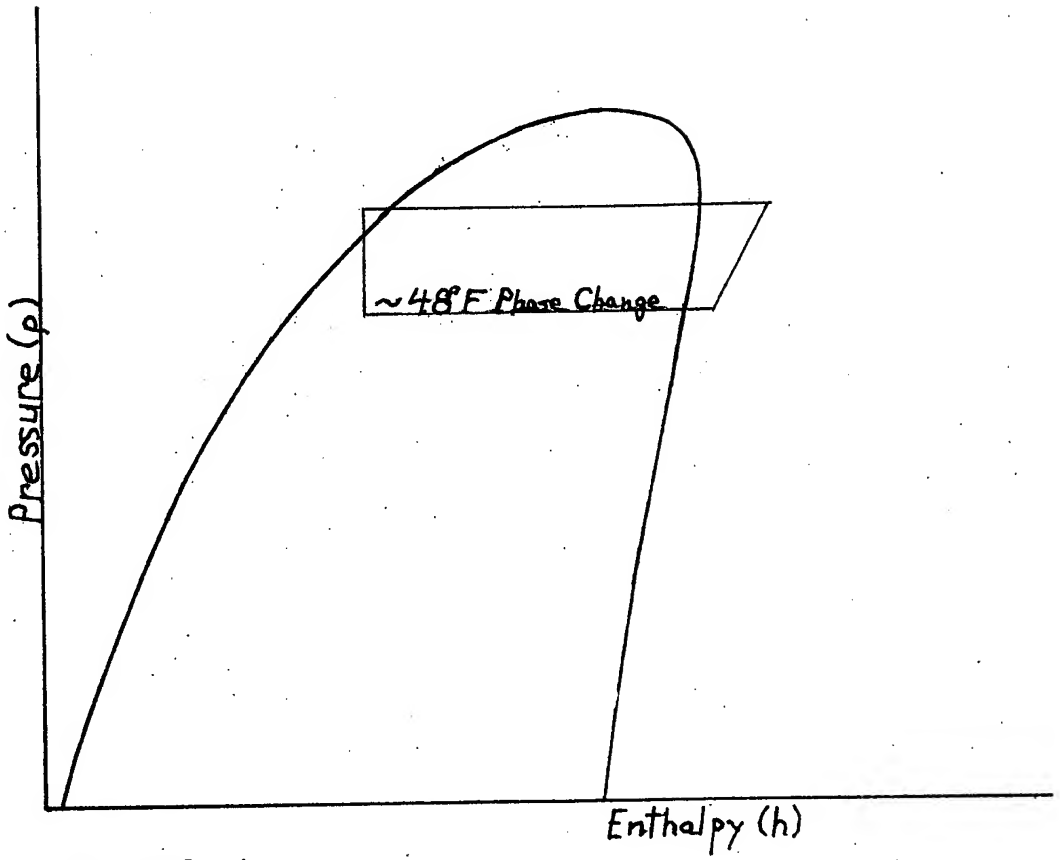


FIG 1b

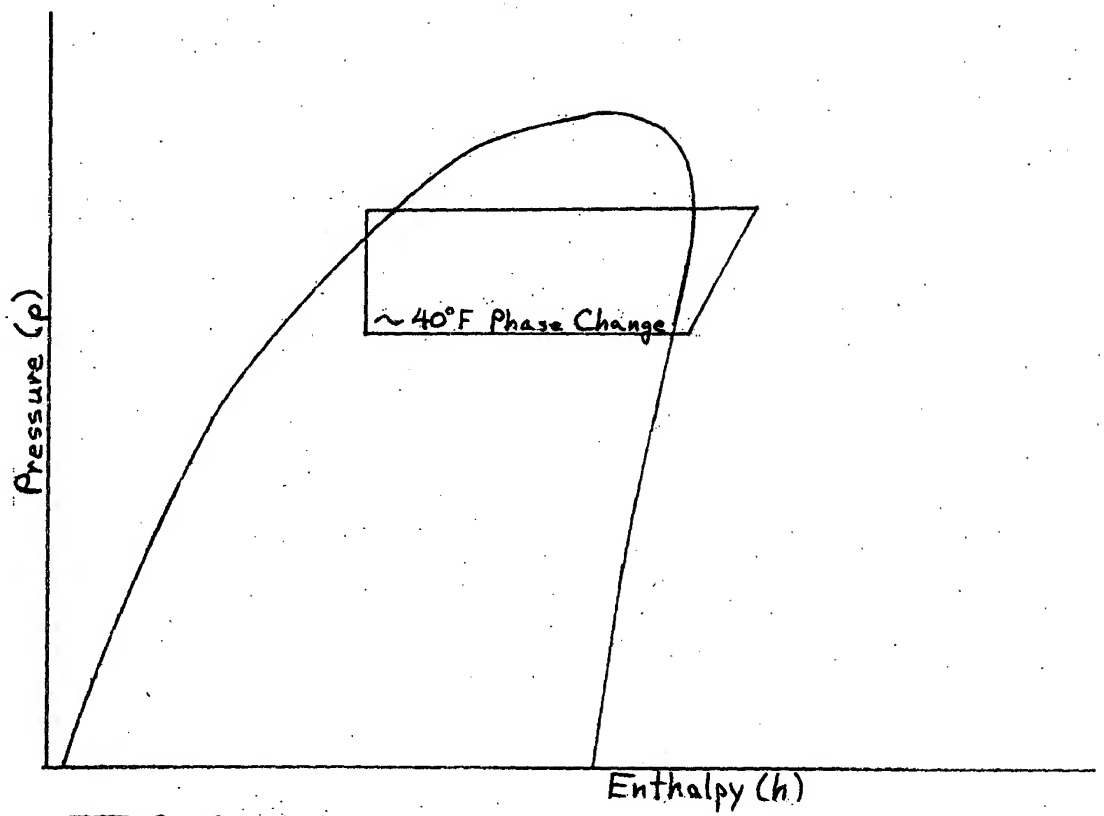


FIG 1c

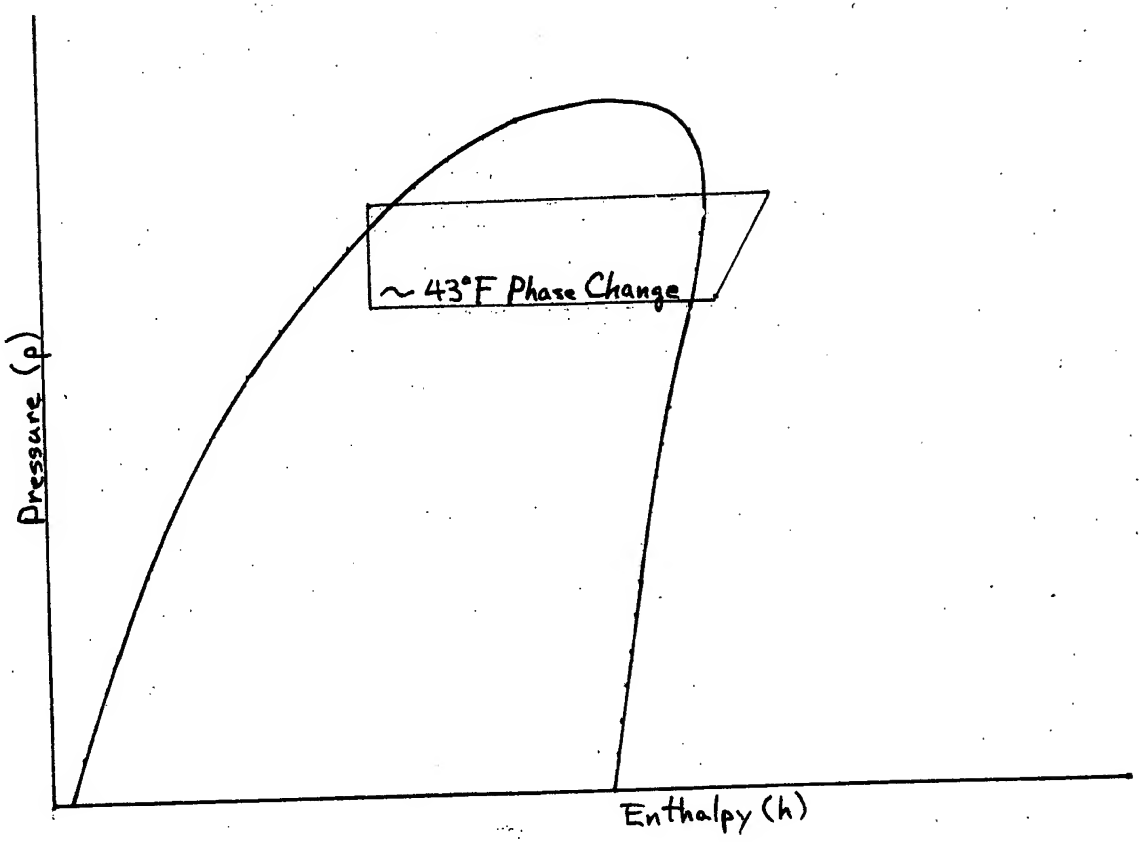


FIG 1d

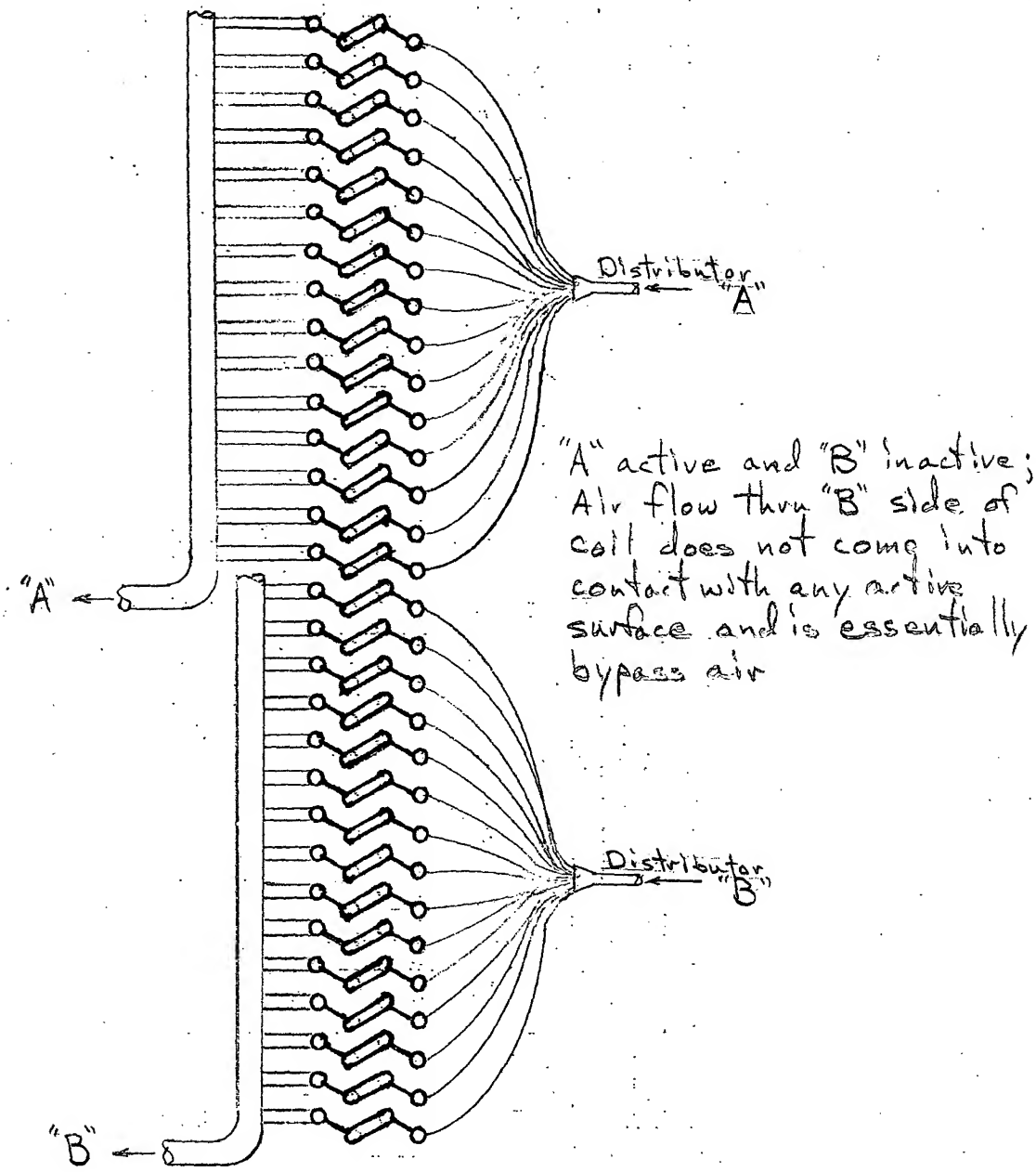

Distributor "A"
"A" active and "B" inactive; Air flow thru "B" side of coil does not come into contact with any active surface and is essentially bypass air
"A"
Distributor "B"
"B"

FIG. 2

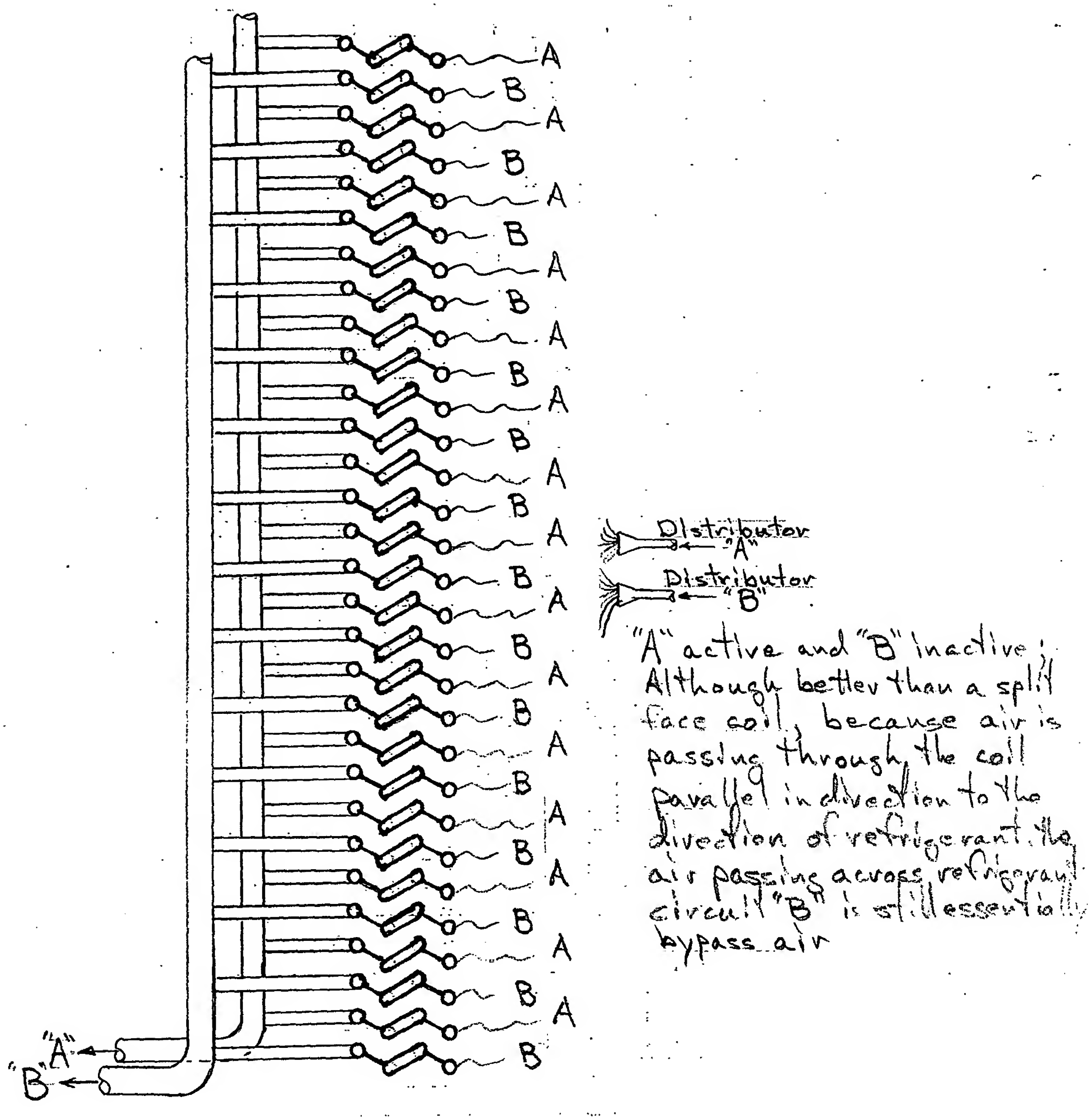

"A"
"B"
Distributor "A"
Distributor "B"
"A" active and "B" inactive; Although better than a split face coil, because air is passing through the coil parallel in direction to the direction of refrigerant, the air passing across refrigerant circuit "B" is still essentially bypass air

FIG. 2a

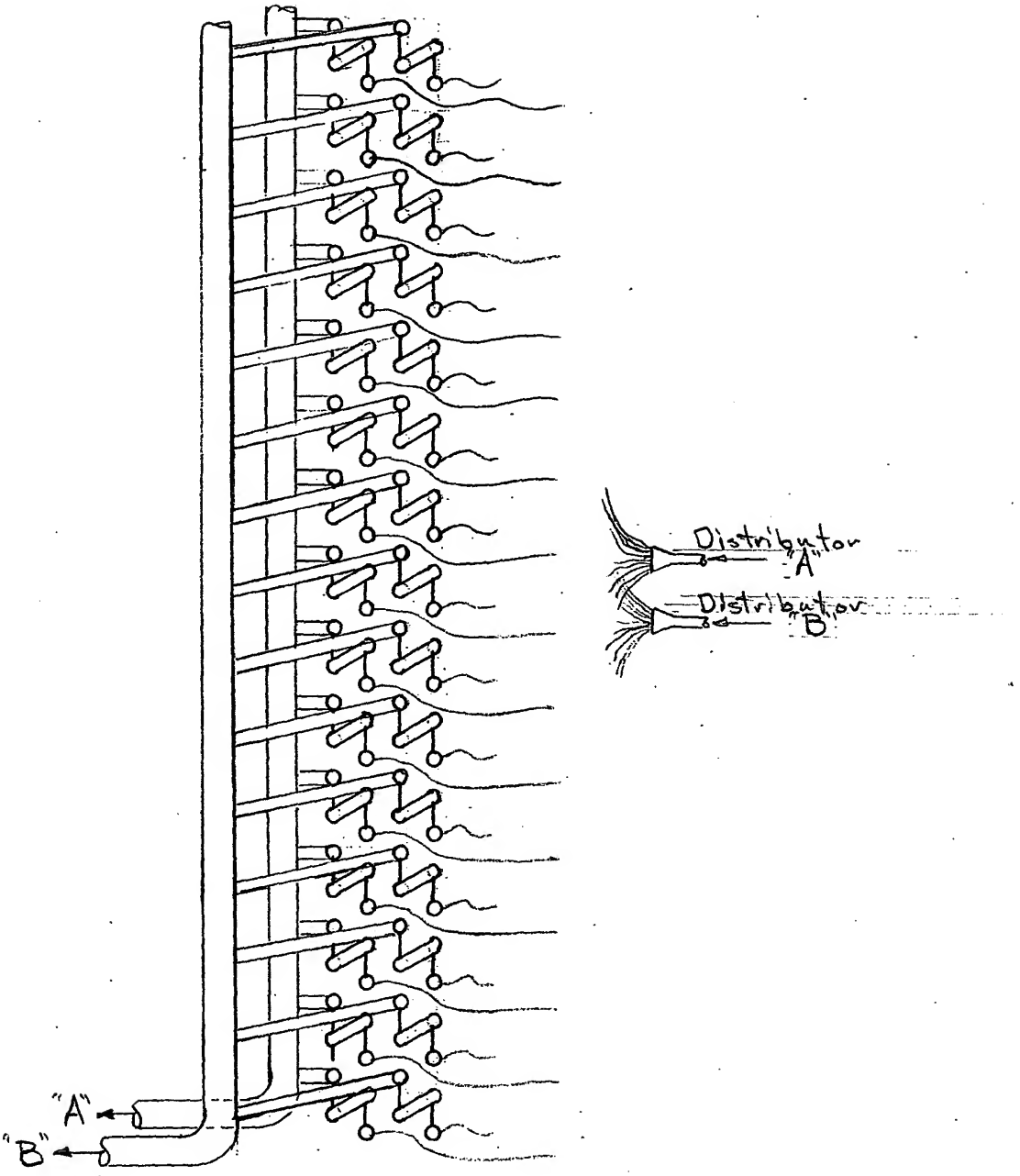


FIG. 2b

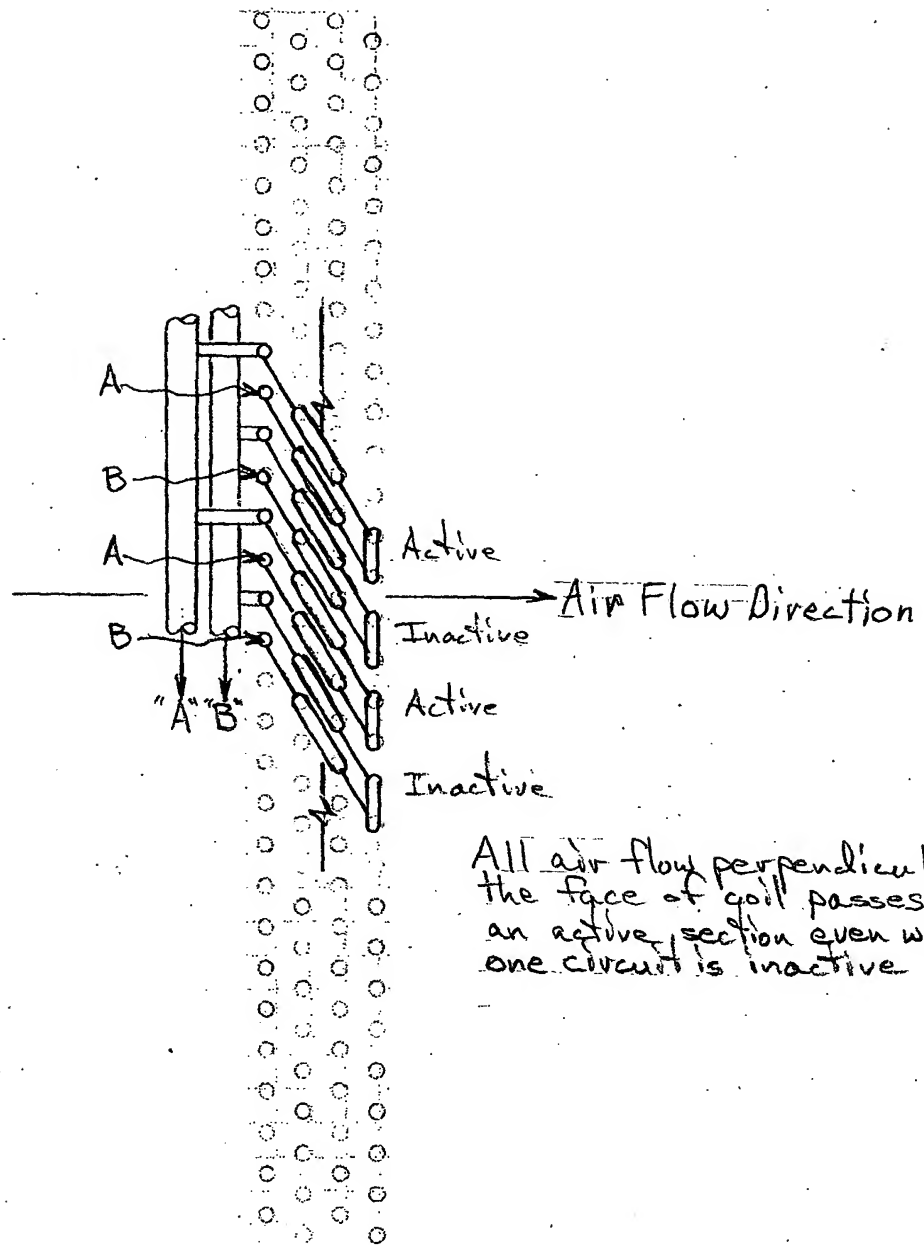
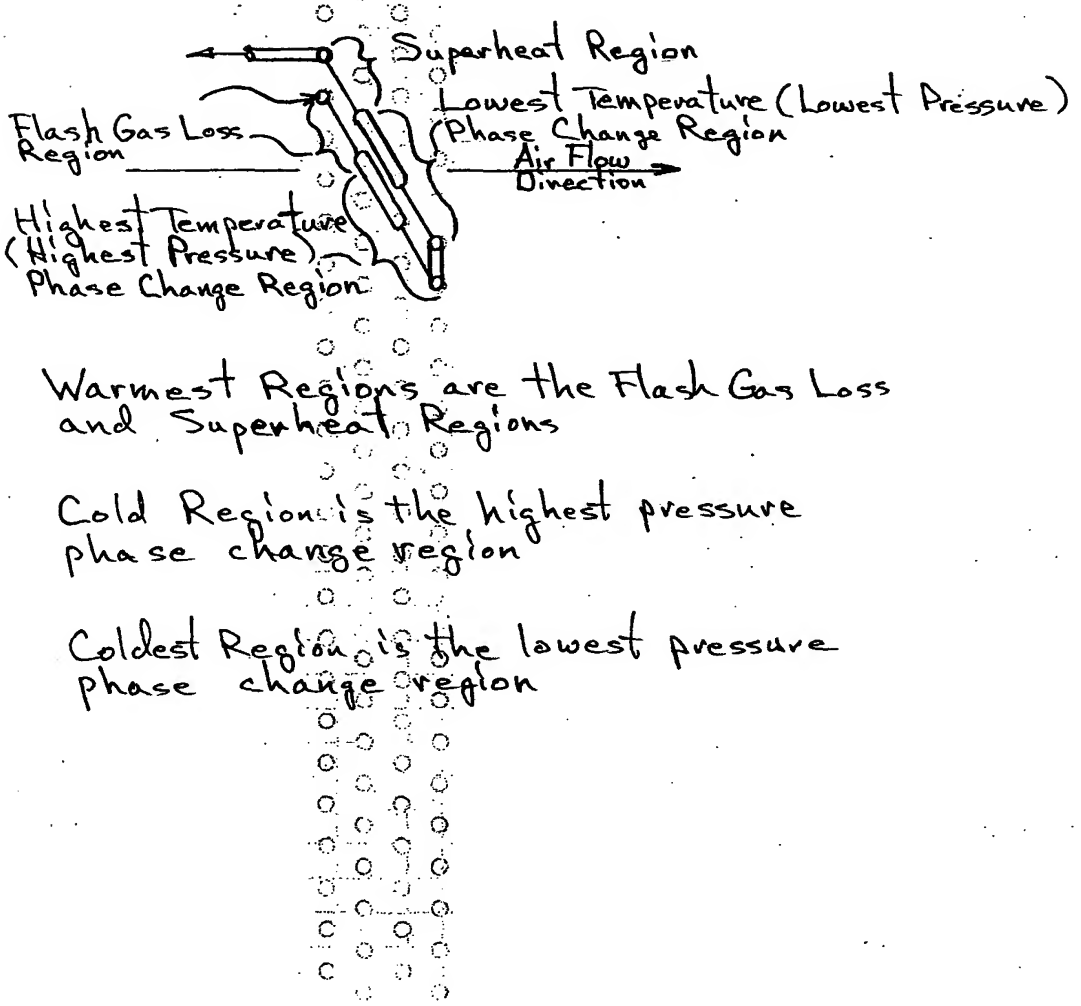

A
B
A
B
"A"
"B"
Active
Inactive
Active
Inactive
Air Flow Direction
All air flow perpendicular to the face of coil passes thru an active section even when one circuit is inactive

FIG. 3

Single Circuit Design For Single Component or Azeotropic Mixture Refrigerants



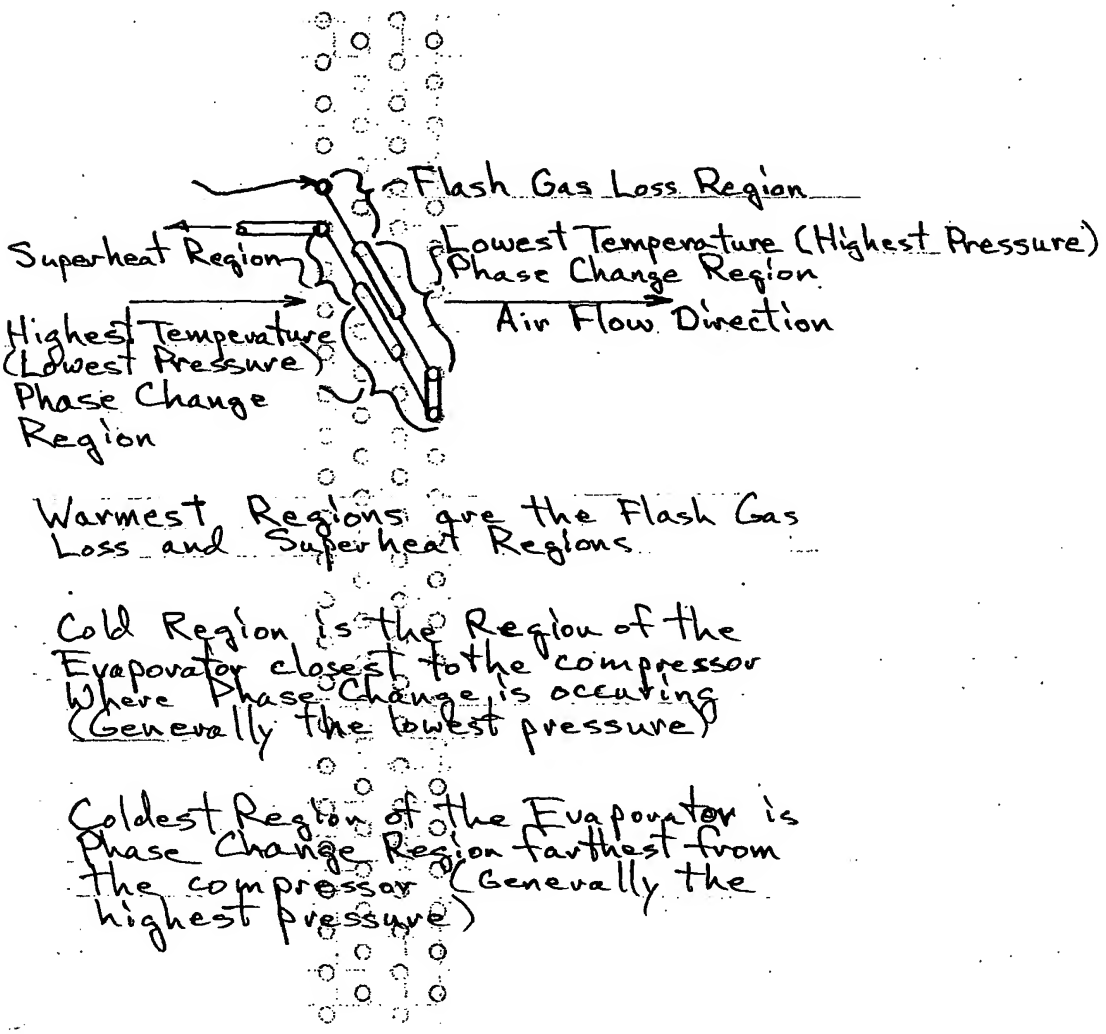
Warmest Regions are the Flash Gas Loss and Superheat Regions

Cold Region is the highest pressure phase change region

Coldest Region is the lowest pressure phase change region

FIG. 3a

Single Circuit Design For Non-Azeotropic Refrigerant Mixtures Such as R-407C That Have A High Glide Differential

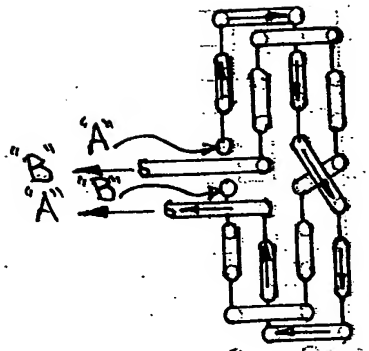


Warmest Regions are the Flash Gas Loss and Superheat Regions

Cold Region is the Region of the Evapovator closest to the compressor where Phase Change is occuring (Generally the lowest pressure)

Coldest Region of the Evapovator is Phase Change Region farthest from the compressor (Generally the highest pressure)

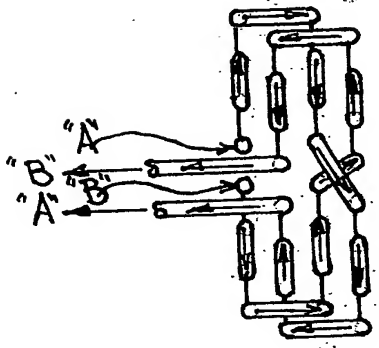
FIG. 3b



"A" Circuit Active Only

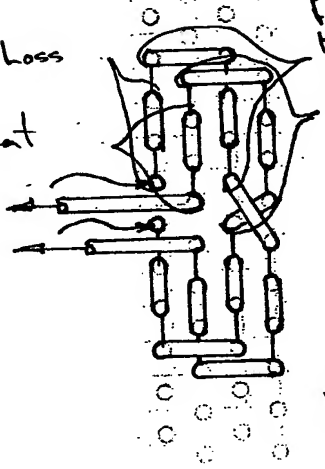
Air Flow Thru Coil Hits Active Circuit Across Full Face Of Coil

FIG. 4a



"A" & "B" Both Active

FIG. 4b

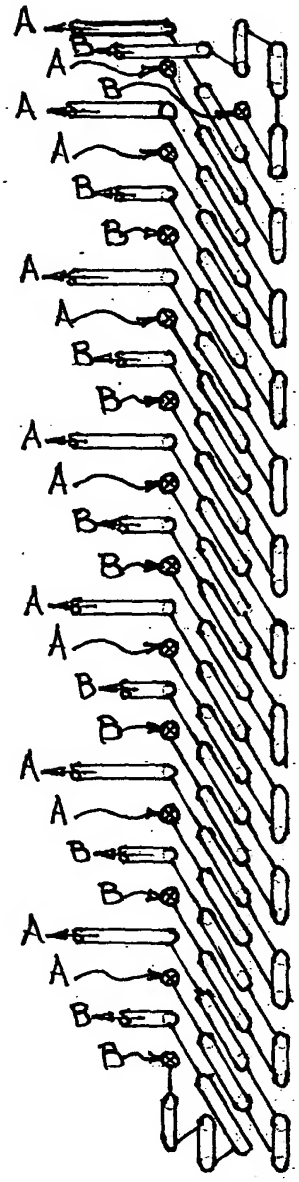


Highest temperature phase change Region

Coldest temperature phase change Region

FIG. 4c

FIG. 4



A active & B inactive.
Because of diagonal flow of refrigerant thru evaporator, air entering perpendicularly to the face of the coil will hit active circuit across the entire face of coil, resulting in No bypass air.

FIG. 5

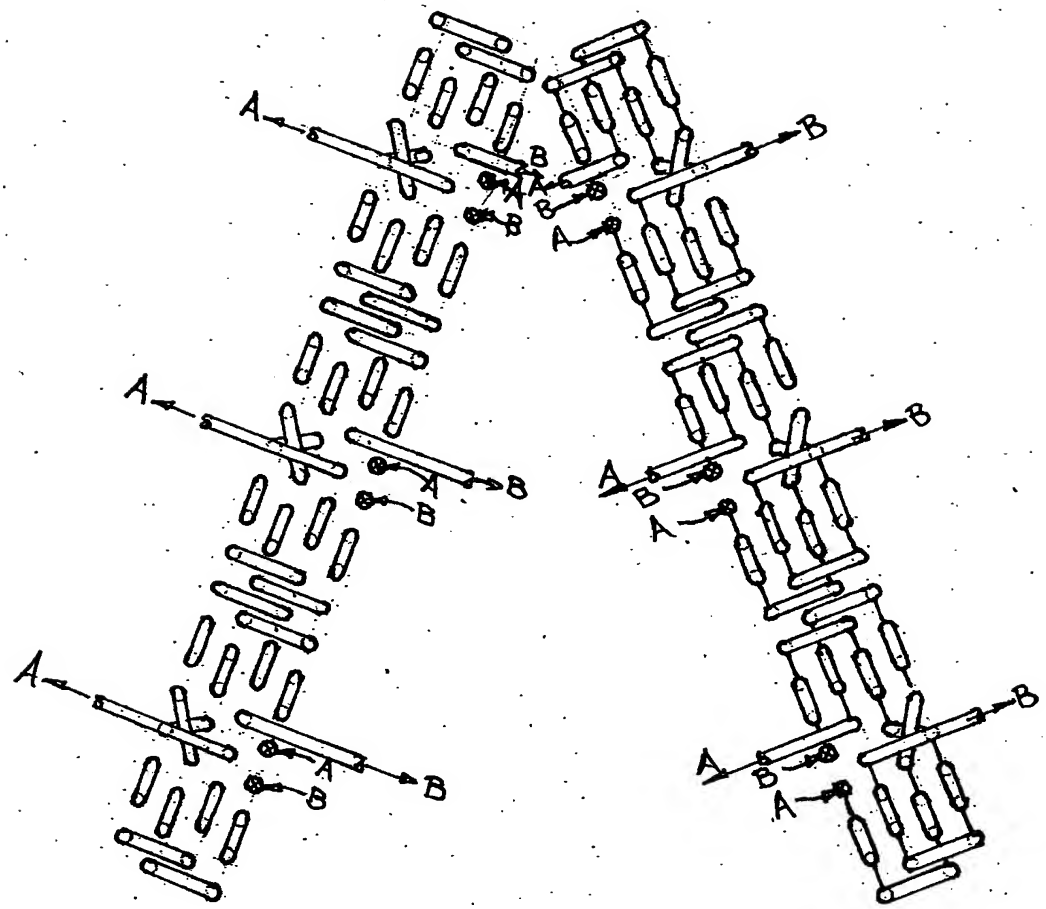


FIG. 6

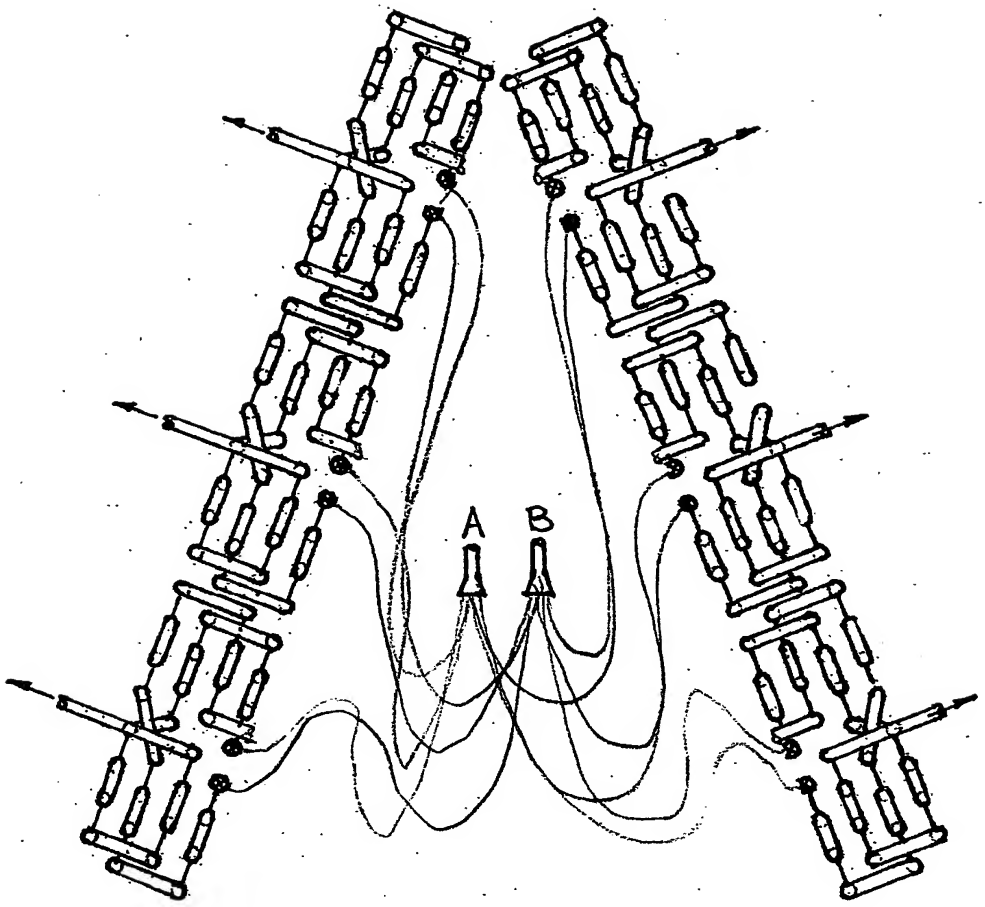


FIG. 6a

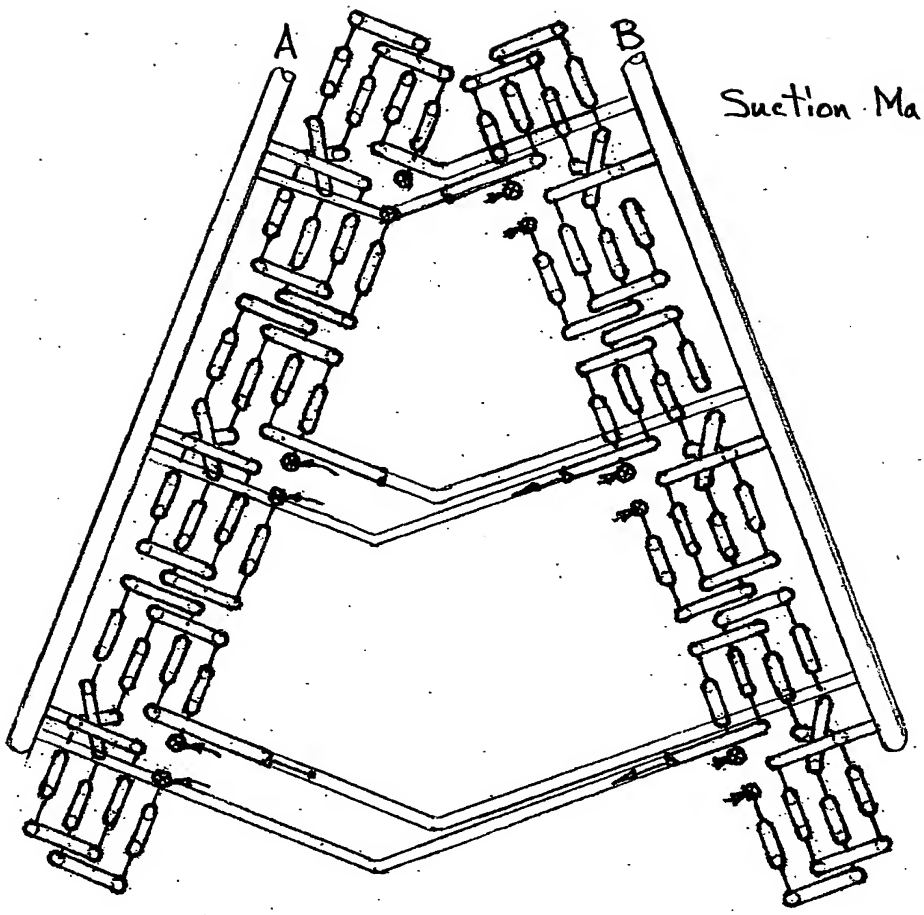


FIG. 6b

Left Side of A Coil

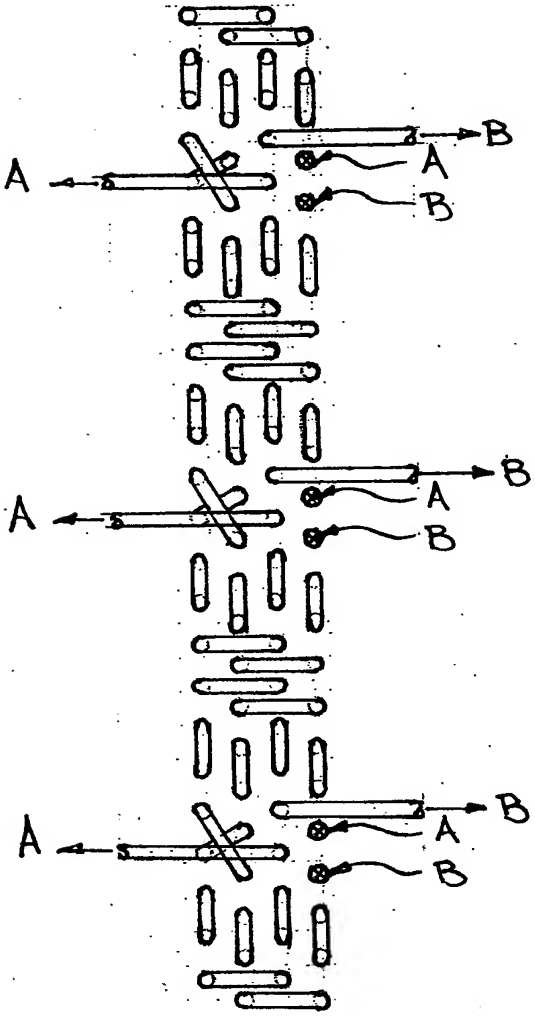


FIG. 6c

Right Side of A Coil

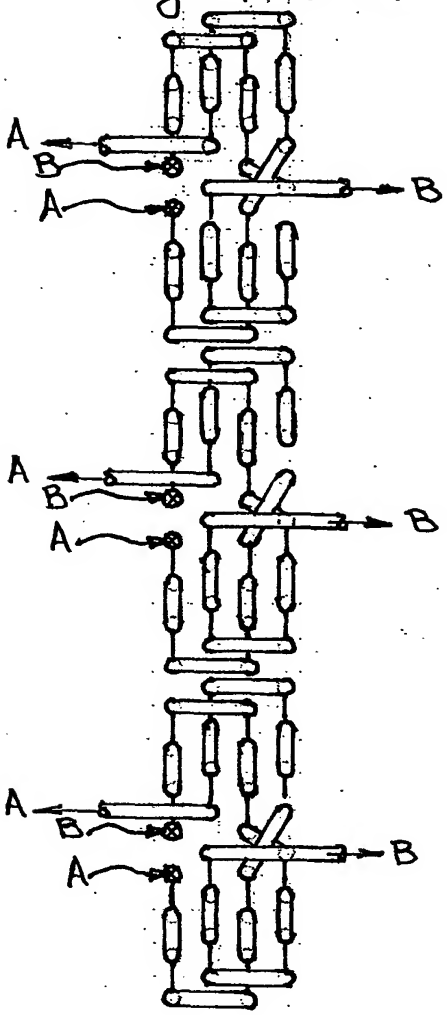


FIG. 6d